



In re Patent Application of:

STEVENSON

Serial No. 09/591,886

Filing Date: June 9, 2000

RECEIVED

JUL 06 2004

Technology Center 2600

In the Claims:

Claims 1-27 (Cancelled).

28. (Currently amended) An image sensor chip comprising:

an image sensor array formed on a top surface of the image sensor chip;

a mosaic overlying said image sensor array comprising at least one color filter material; and

a barrier on the top surface of the image sensor chip extending along at least a substantial part of at least one side of said image sensor array, said barrier comprising the at least one color filter material.

29. (Previously presented) The image sensor chip of Claim 28 wherein said barrier is at least three microns high.

30. (Previously presented) The image sensor chip of Claim 28 wherein said barrier surrounds said image sensor array.

31. (Cancelled).

32. (Currently amended) The image sensor chip of Claim ~~31~~ 28 wherein the at least one color filter material comprises a plurality of color filter materials; and wherein said barrier comprises a plurality of layers each comprising at least one of

In re Patent Application of:

STEVENSON

Serial No. 09/591,886

Filing Date: June 9, 2000

the plurality of color filter materials.

33. (Previously presented) An image sensor device comprising:

a substrate;

an image sensor chip mounted on said substrate and having a top surface;

an image sensor array formed on the top surface of said image sensor chip;

a dam wall formed on said substrate surrounding a periphery of said image sensor chip and having an upper edge;

a transparent lid affixed to the upper edge of said dam wall and encapsulating said image sensor chip; and

a barrier on the top surface of said image sensor chip extending along at least a substantial part of at least one side of said image sensor array between said image sensor array and said dam wall.

34. (Previously presented) The image sensor device of Claim 33 wherein said barrier is at least three microns high.

35. (Previously presented) The image sensor device of Claim 33 wherein said barrier surrounds said image sensor array.

36. (Previously presented) The image sensor device of Claim 33 wherein said image sensor device further comprises a mosaic overlying said image sensor array comprising at least one

In re Patent Application of:

STEVENSON

Serial No. 09/591,886

Filing Date: June 9, 2000

color filter material; and wherein said barrier comprises the at least one color filter material.

37. (Previously presented) The image sensor device of Claim 36 wherein the at least one color filter material comprises a plurality of color filter materials; and wherein said barrier comprises a plurality of layers each comprising at least one of the plurality of color filter materials.

38. (Previously presented) An image sensor device comprising:

- a substrate;

- an image sensor chip mounted on said substrate and having a top surface;

- an optical element formed on the top surface of said image sensor chip;

- a dam wall, formed on said substrate surrounding a periphery of said image sensor chip and having an upper edge;

- a transparent lid affixed to the upper edge of said dam wall and encapsulating said image sensor chip; and

- a barrier on the top surface of said image sensor chip surrounding said optical element between said optical element and said dam wall.

39. (Previously presented) The image sensor device of Claim 38 wherein said barrier is at least three microns high.

In re Patent Application of:

STEVENSON

Serial No. 09/591,886

Filing Date: June 9, 2000

40. (Previously presented) The image sensor device of Claim 38 wherein said image sensor device further comprises a mosaic overlying said optical element comprising at least one color filter material; and wherein said barrier comprises the at least one color filter material.

41. (Previously presented) The image sensor device of Claim 40 wherein the at least one color filter material comprises a plurality of color filter materials; and wherein said barrier comprises a plurality of layers each comprising at least one of the plurality of color filter materials.